

Work Order ID 135676

Friday, August 14, 2015 1:11:57 PM

135676

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Item ID: D5039-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Chain
 Start Date: 8/14/15 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 8/21/15 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: [Signature] Date: 15-8-1 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5039	<u>A/B</u>

100 0.00
100
 Purchasing CY AUG 14 2015 10

Purchasing Memo 0.00
 Issue P/O: 29471
 Description: Chain
 Supplier: Acklands Grainger mcmaster
 Supplier P/N: 61076 6264K85
 Material release note is required.

110 Receive & Inspect for Damage & Mat'l Certs 0.00
110
 Packaging 10 8015-08-17
 Packaging

Memo 0.00
 TEST EACH CHAIN AS PER DWG, TEST TO 330#

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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 Required Date: 8/21/15 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							DAS 38 9-89
120									
QC	Memo	0.00							
Quality Control	***TEST EACH CHAIN AS PER DWG, TEST TO 330#***								AUG 17 2015
130	Identify as per dwg & Stock Location: <u>ST143</u>	0.00							
130									
Packaging	Memo	0.00							(10) DAS 27 J.A 9-89
Packaging									AUG 17 2015
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							MLJ
Quality Control									AUG 18 2015

MLJ AUG 18 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 135676

135676

Parent Item: D5039-1

D5039-1

Parent Item Name: Chain

Start Date: 8/14/15

Required Date: 8/21/15

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 14.05.26 NEW ISSUE/ECN14-567 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
6L076		Purchased		No			f	0.0000		10			
61076 Chain	6264K85								**	10		8/15-08-17	

DQA: _____ Date: _____



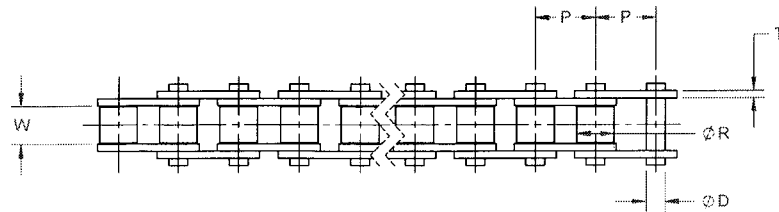
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

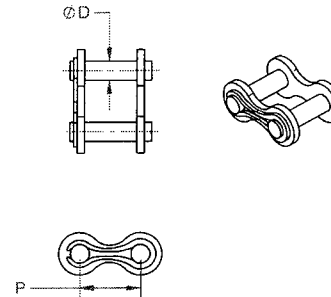
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : ☐							

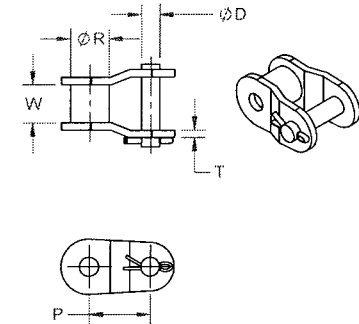
SPECIFICATION CONTROL DRAWING



D5039-1 CHAIN



D5039-3 MASTER LINK



D5039-5 HALF LINK

DART P/N	DESCRIPTION	MATERIAL	WEIGHT (LB/FT)	MANUFACTURER	MANUFACTURER P/N	VENDOR	VENDOR P/N	ALTERNATE VENDOR	ALTERNATE VENDOR P/N	P	W	T	D	R
D5039-1	CHAIN	304 SS	0.43	TSUBAKI	A140004	ACKLANDS GRAINGER	6L076	MCMaster CARR	6264K85	0.50	0.31	0.06	0.16	0.31
D5039-3	MASTER LINK	304 SS	0.43	TSUBAKI	RS40-SS-1	ACKLANDS GRAINGER	6L094	MCMaster CARR	6264K52	0.50	0.31	0.06	0.16	0.31
D5039-5	HALF LINK	304 SS	0.02	-	-	-	-	MCMaster CARR	6264K72	0.50	0.31	0.06	0.16	0.31

D5039-X CHAIN

- NOTES:
- 1) MATERIAL: SEE TABLE
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
 - 7) WEIGHT: SEE TABLE

15-8.14
135676

PRELIMINARY ISSUE

B	ADD ALTERNATE VENDOR: ZN B3-1, ADD -5; ZNB8-1, C2-1	VS	15.03.04
A	NEW ISSUE	AK	14.01.15
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	AK	DRAWING NO.	REV. B2
MFG. APPR.	JLM	D5039	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CHAIN	NTS
DATE	15.03.04	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29471**

Purchase Order Date 8/14/2015

PO Print Date 8/14/2015

Page Number 1 of 2

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	6264k85 AS PER DWG D5039 REV. B2 B135676	Chain	8/17/2015 Yes 8/17/2015		10.00 Each	\$18.73	\$187.30
Line Total:							\$187.30
2	97787A661 AS PER DWG D4711 REV. C B135357	Expandable Pin	8/17/2015 Yes 8/17/2015		6.00 Each	\$114.68	\$688.08
Line Total:							\$688.08
3	71400-90	4061T23 O-RING	8/17/2015 Yes 8/17/2015		1.00 Each	\$8.07	\$8.07

PO Instructions: PROCUREMENT QUALITY CLAUSES
A000 CLAUSES NOT REQUIRED

Note:

8/14/2015

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO29471

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7361958-01

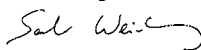
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08/14/2015

Line	Product	Ordered	Shipped
1	6264K85 Highly Corrosion-Resistant Roller Chain, 304 Stainless Steel, ANSI #40-Stainless Steel, 1/2" Pitch, 10' LG	1 Each	1
2	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length	6 Each	6
3	4061T23 Square-Profile O-Ring, Oil-Resistant Buna-N, Dash Number 208, Packs of 50 Your Part Number: 71400-90	1 Pack	1
4	94125K811 Metric Compression Spring, Music Wire, 20MM Overall, 11.25MM OD, 1.25MM Wire, Packs of 5 Your Part Number: 71400-30	1 Pack	1

2015-08-17

McMaster-Carr Supply Company 200 Aurora Industrial Pkwy Aurora, OH 44202-8087 USA Phone: 330-995-5500 Fax: 330-995-9600 E-Mail: cle.sales@mcmaster.com Employer Identification Number (EIN): 36-1458720		Invoice: 36784635 Purchase Order: PO29471 Release: McMaster-Carr Number: 7361958-01		ORIGINAL COMMERCIAL INVOICE CERTIFICATE OF ORIGIN	
Ultimate Destination: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada		Shipped: 14-Aug-2015		FOB: ORIGIN	
		Shipper's Export Declaration (SED): NO EEI 30.36			
Intermediate Consignee:		Bill To: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada			
		Tax Number:			
Forwarding Agent:		Billing Attention:			
		Shipping Attention:			
		Contact:			

Line	Description	Qty & Unit	Unit Price	Extension
1	6264K85 Highly Corrosion-Resistant Roller Chain, 304 Stainless Steel, ANSI #40-Stainless Steel, 1/2" Pitch, 10' LG Country of Origin: Japan Schedule B #: 731511 ECCN #: EAR99 NLR	1 EA	\$187.30	\$187.30
2	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length Country of Origin: United States Schedule B #: 731829 ECCN #: 9A991 NLR	6 EA	\$114.68	\$688.08
3	4061T23 Square-Profile O-Ring, Oil-Resistant Buna-N, Dash Number 208, Packs of 50 71400-90 Country of Origin: Peoples Republic of China Schedule B #: 401693 ECCN #: EAR99 NLR	1 PK	\$8.07	\$8.07
4	94125K811 Metric Compression Spring, Music Wire, 20MM Overall, 11.25MM OD, 1.25MM Wire, Packs of 5 71400-30 Country of Origin: United States Schedule B #: 732020 ECCN #: EAR99 NLR	1 PK	\$12.33	\$12.33
	NOTE Tracking number(s) for this shipment: 647899829952			
Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.				
These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to US law is prohibited.				
Shipping Weight (in kgs): 3		Number of Packages: 1		Invoice Amounts:
Package Dimensions: 36 X 21 X 11 CM = .008 CUBIC M		Merchandise Amount: \$895.78 Total (In USD): \$895.78		
Authorized Signature: 		Date: 14-Aug-2015		Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days
Name: Sarah Weinberg		Title: Operations Mgr.		Remit payment to: (by wire transfer) Bank of America Illinois 231 S LaSalle Chicago, IL 60697 ABA 071000039 Account 86666-02021 SWIFT BOFAUS3N
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